COMPUTER SCIENCE

Certificates of Proficiency and Skills Certificates in Computer Science

Certificate of Proficiency: C++ Programming

C3 1	AND
CS 1L	Lab: Introduction to Computers and Computer Technology
	OR
CS 2	Foundations of Computer Science
CS 11	Introduction to Programming Concepts and Methodology, C++
	OR
CIS 132	Introduction to Internet Programming
CS 19	C++ Programming
MATH 154	Elementary Algebra
	OR
MATH 4	Pre-Calculus and Trigonometry
COMM 2	or COMM 10
ENGL 1A	or ENGL 1AMC
	Total for Certificate of Proficiency22 – 24
	ate of Proficiency: Java Programming
CS 1	Introduction to Computers and Computer Technology
66.11	AND
CS 1L	Lab: Introduction to Computers and Computer Technology
CS 2	
CS 12J	Foundations of Computer Science
C3 12)	OR
CIS 132	Introduction to Internet Programming
CS 20J	Java Programming
MATH 154	Elementary Algebra
1417 (111 10 1	OR
MATH 4	Pre-Calculus and Trigonometry
COMM 2	or COMM 10
ENGL 1A	or ENGL 1AMC
	Total for Certificate of Proficiency22 – 2 ¹
	Total for Certificate of Proficiency22 – 2
■ Certific	cate of Proficiency: Programming
■ Certific	
CS 19	cate of Proficiency: Programming C++ Programming OR
CS 19 CS 20J	cate of Proficiency: Programming C++ Programming OR Java Programming
CS 19 CS 20J CS 21	cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms
CS 20J CS 21 CS 23	cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics
CS 20J CS 21 CS 23 CS 24	cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29	cate of Proficiency: Programming C++ Programming OR Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130	Cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms //MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131	cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A	cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2	cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A	Cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms //MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2	cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10
CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: cate of Proficiency: Web Programming
CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A	C++ Programming C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms //MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: atte of Proficiency: Web Programming Introduction to Programming Oncepts and Methodology, Java OR
CS 19 CS 20) CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A	Cate of Proficiency: Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: Cate of Proficiency: Web Programming Introduction to Programming Introduction to Programming
CS 19 CS 20) CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 131 COMM 2 ENGL 1A Certific CS 12J CS 20J	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: cate of Proficiency: Web Programming Introduction to Programming Concepts and Methodology, Java OR Java Programming Perl Programming in a Unix Environment
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A CS 12J CS 20J CIS 20J CIS 131	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: cate of Proficiency: Web Programming Introduction to Programming Concepts and Methodology, Java OR Java Programming Perl Programming in a Unix Environment Introduction to Internet Programming
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A CS 12J CS 20J CIS 131 CIS 131 CIS 132	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: cate of Proficiency: Web Programming Introduction to Programming Concepts and Methodology, Java OR Java Programming Perl Programming in a Unix Environment
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A CS 12J CS 20J CIS 131 CIS 131 CIS 132	C++ Programming C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms //MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: cate of Proficiency: Web Programming Introduction to Programming Concepts and Methodology, Java OR Java Programming Introduction to Internet Programming Introduction to Internet Programming Introduction to Internet Programming Introduction to Internet Programming Introduction to Programming Introduction to Programming Introduction to Programming
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A CS 12J CS 20J CIS 131 CIS 132 CIS 133 CIS 135 CIS 165	C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms //MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: cate of Proficiency: Web Programming Introduction to Programming Concepts and Methodology, Java OR Java Programming Perl Programming in a Unix Environment Introduction to Internet Programming Introduction to Programming Database-driven Web Sites with ASP OR
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A CS 12J CS 20J CIS 131 CIS 132 CIS 133 CIS 135 CIS 165	C++ Programming C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: ate of Proficiency: Web Programming Introduction to Programming Concepts and Methodology, Java OR Java Programming in a Unix Environment Introduction to Internet Programming Introduction to Programming Database-driven Web Sites with ASP OR Introduction to Programming Database-driven Web Sites with PHP
CS 19 CS 20J CS 21 CS 23 CS 24 CS 29 CIS 130 CIS 131 CIS 132 MATH 5A COMM 2 ENGL 1A CS 20J CIS 131 CIS 132 CIS 135 CIS 136 CS 20J CIS 131 CIS 136 CIS 165 CIS 165PH	C++ Programming C++ Programming C++ Programming OR Java Programming Introduction to Data Structures and Algorithms /MATH 23 Discrete Mathematics Elementary Computer Organization Object Oriented Programming UNIX/Linux Shell Programming Perl Programming in a Unix Environment Introduction to Internet Programming Analytic Geometry and Calculus I or COMM 10 or ENGL 1AMC Total for Certificate of Proficiency 3: cate of Proficiency: Web Programming Introduction to Programming Concepts and Methodology, Java OR Java Programming in a Unix Environment Introduction to Internet Programming Introduction to Internet Programming Introduction to Internet Programming Introduction to Internet Programming Introduction to Programming Database-driven Web Sites with ASP OR

MATH 154	Elementary Algebra	4
	OR	
MATH 4	Pre-Calculus and Trigonometry	5
COMM 2	or COMM 10	3
ENGL 1A	or ENGL 1AMC	3
	Total for Certificate of Proficiency	- 27
Skills (Certificate: Game Programming	
CS 11	Introduction to Programming Concepts and Methodology, C+	4
	OR	
CS 12J	Introduction to Programming Concepts and Methodology, Java	4
CS 20J	Java Programming	4
CIS 160GP	Game Programming in Java	
	Total for Skills Certificate	. 12
Skills (Certificate: Web Programming	
CS 12J	Introduction to Programming Concepts and Methodology, Java	4
	OR SALES	
CS 20J	Java Programming	4
CIS 131	Perl Programming in a Unix Environment	
	OR	
CIS 132	Introduction to Internet Programming	4
CIS 165	Introduction to Programming Database-driven Web Sites with ASP	
	OR	
CIS 165PH	Introduction to Programming Database-driven Web Sites with PHP	4
	OR	
CIS 165J	Introduction to Programming Database-driven Web Sites with Java	4

Who May Enroll

Cabrillo College is open to anyone 18 years of age or older, or anyone with a high school diploma or proficiency certificate. High school students also may attend classes at Cabrillo on a limited basis with the permission of their high school principals. For admission information: http://www.cabrillo.edu/services/webred/

Limited English language skills will not be a barrier to admission to and participation in occupational education programs. Students with limited English proficiency may need to develop their skills through ESL, English and Reading courses before entering programs with English prerequisites.

If you have or think that you may have a learning, psychological or physical disability and are in need of reasonable accommodations, and/or assistance with applying to this program, please contact Disabled Student Services at (831) 479-6379. Identification of disability is voluntary and will in no way jeopardize program selection. If accommodations need to be made for State and National Registry examinations, the disability must be certified.

Due to the rapid changes in job markets and to career education, please be advised that the information contained in this brochure may have been updated. Check with a counselor for current program requirements or check our website at: http://www.cabrillo.edu/programs

click on: Computer Science

Nondiscrimination Policy

Cabrillo Community College does not discriminate on the basis of ethnic group identification, national origin, religion, age, sex, race, color, physical or mental disability, or sexual orientation in any of its policies, procedures, or practices. This nondiscrimination policy covers admission and access to, and treatment and employment in, the college's programs and activities, including vocational education programs. Limited English language skills will not be a barrier to admission to and participation in vocational education programs.

Plan de accion no discriminatoria

Cabrillo Community College no discrimina a base de identificación con grupos étnicos, nacionalidad de origen, religión, edad, sexo, raza, color, incapacidad mental o física ni orientación sexual en ninguna de sus reglamentaciones, procedimientos o prácticas. Este plan de acción no discriminatoria incluye la admisión y el acceso a los programas y actividades, y el tratamiento y el empleo en los mismos, incluyendo la educación vocacional. Tener limitadas destrezas en el idioma inglés no constituirá una barrera para ser admitido o participar en los programas de educación vocacional.

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